(No Model.) 2 Sheets—Sheet 1.

# W. THORNBURGH.

## COUPLING ATTACHMENT FOR RAILWAY CARS.

No. 606,102. Patented June 21, 1898.

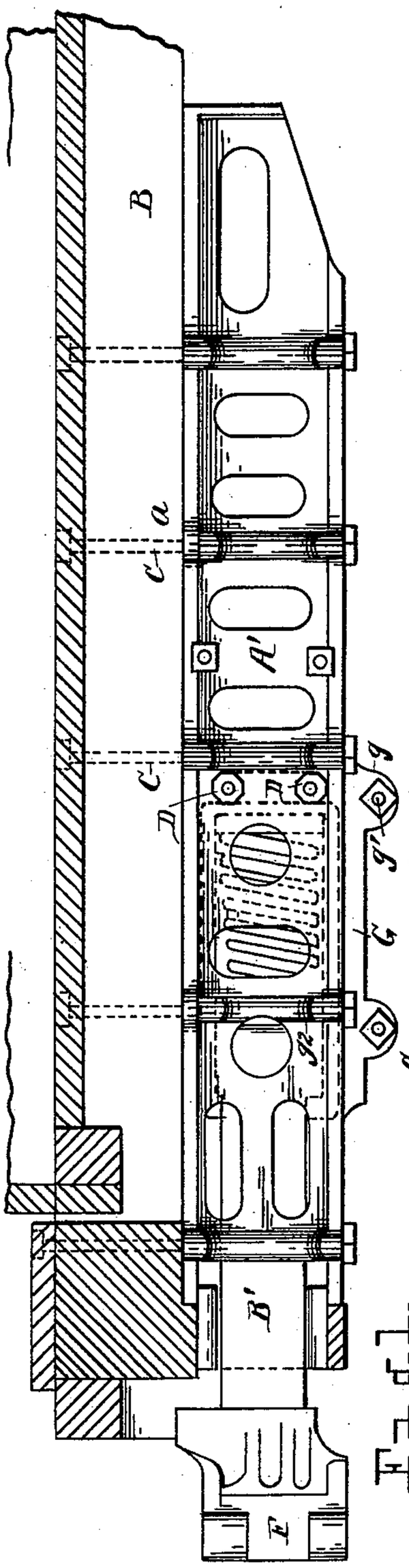


Fig. 1.

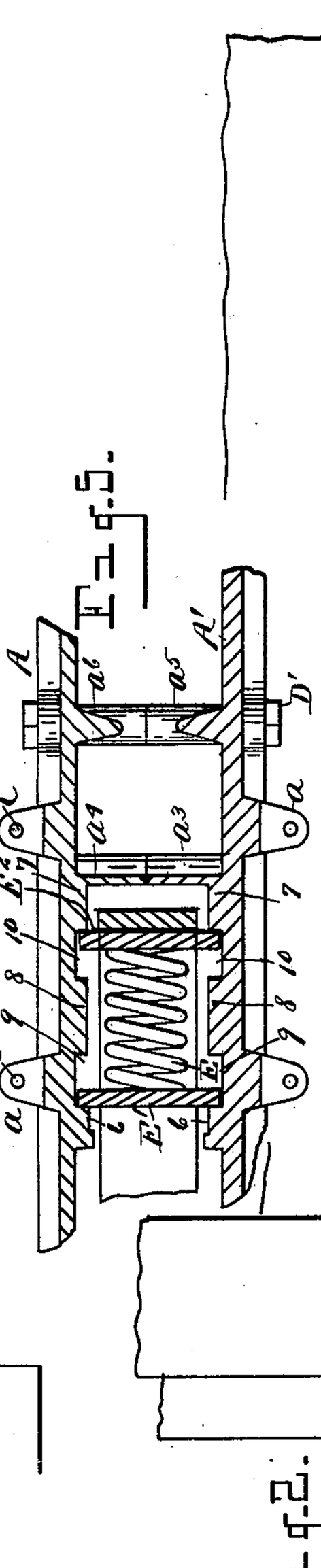


Fig. 5.

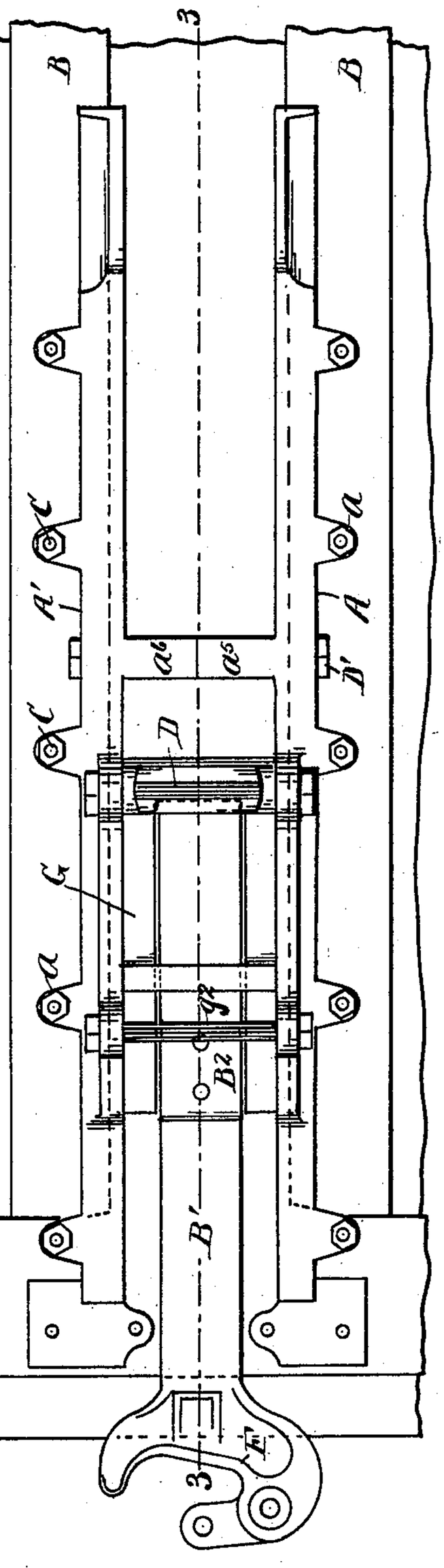


Fig. 2.

WITNESSES

O. B. Barringer

Mary Hickey.

INVENTOR

William Thornburgh

By his Attorney

Newell S. Wright

(No Model.) 2 Sheets—Sheet 2.

# W. THORNBURGH.

## COUPLING ATTACHMENT FOR RAILWAY CARS.

No. 606,102. Patented June 21, 1898.

Fig. 3.

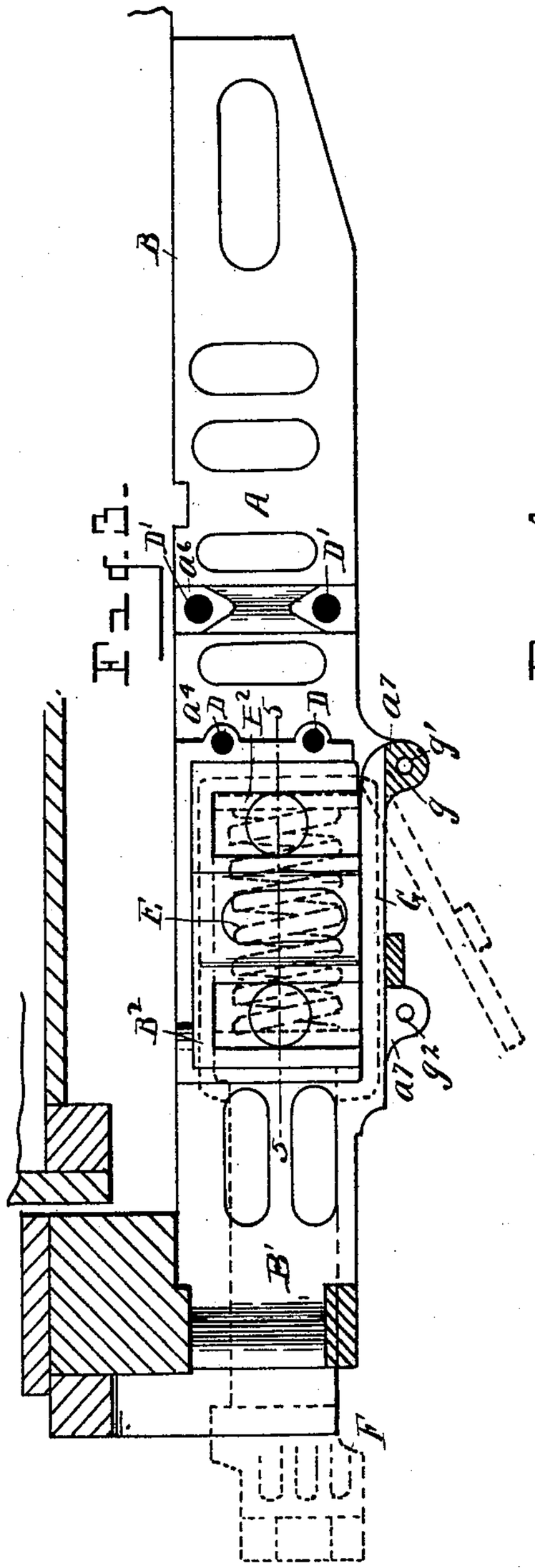
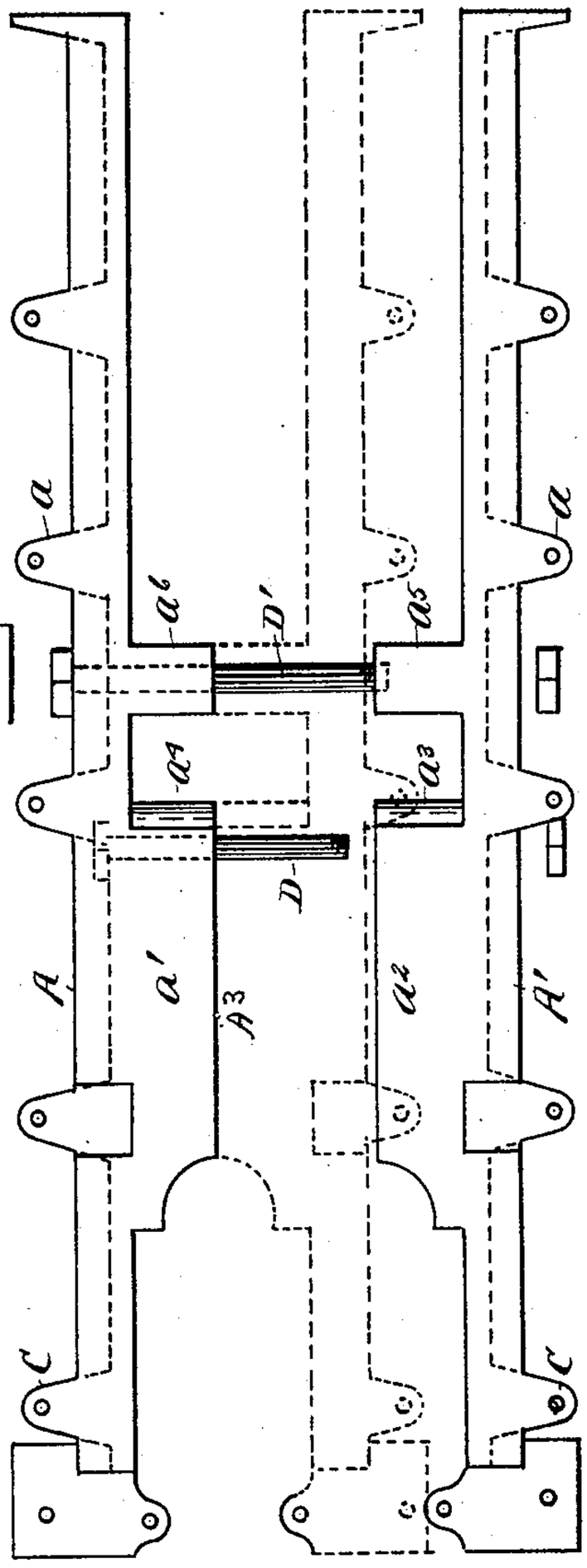



Fig. 4.




WITNESSES

O. B. Baenziger

Mary Hickey.

INVENTOR

William Thornburgh

By his Attorney

Merrill & Wright.

# UNITED STATES PATENT OFFICE.

WILLIAM THORNBURGH, OF SHELBY, OHIO, ASSIGNOR TO THE THORNBURGH COUPLER ATTACHMENTS COMPANY, LIMITED, OF DETROIT, MICHIGAN.

## COUPLING ATTACHMENT FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 606,102, dated June 21, 1898.

Application filed November 19, 1897. Serial No. 659,084. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM THORNBURGH, a citizen of the United States, residing at Shelby, county of Richland, State of Ohio, have invented a certain new and useful Improvement in Coupler Attachments for Railway-Cars; and I declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to certain new and useful improvements in coupler attachments for railway-cars, the same being applicable for freight and passenger cars and for locomotives; and it consists of the construction of devices and appliances hereinafter described and claimed, and shown in the accompanying drawings, in which—

Figure 1 is a side elevation of the attachment, showing certain portions of the car in section. Fig. 2 is an inverted plan view. Fig. 3 is a longitudinal section on the line 3 3, Fig. 2. Fig. 4 is a plan view showing in full lines the two portions of the attachment separated, the dotted lines indicating the positions of said portions when united. Fig. 5 is a horizontal section in line 5 5, Fig. 3, through portions of the device, showing the draft-spring housing and related parts.

My invention more particularly has for its object a coupler attachment of metal whereby the customary draft-timbers upon the car may be dispensed with, my improved device taking the place of said draft-timbers, the same being designed to be engaged with the center sills of the car. By my invention, no draft-timbers or old-fashioned attachments connected therewith being required, the construction is obviously simplified, as well as the means and labor of attaching the device to a car, inasmuch as the number of parts required for my improved coupler attachment is materially reduced and the expense of application and maintenance of the same is brought to a minimum. Some features of the invention, as illustrated in the accompanying drawings, are analogous to features embodied in United States Letters Patent for "Improvements in draft apparatus for railway-cars," granted to me August 24, 1897, No. 588,722. As in said specification, so in the present case, my invention is designed to render it possible to employ what is known as a "Master Car-Builders'" yoke, spring-pocket, or housing, and springs for draw-bars; also, as in said specification previously made, to avoid an undue compression of the draft-springs either in pulling or buffing, while, furthermore, the construction of my present invention is such that as in case of damage to the draw-bar or spring or other portions of the attachment the same may be easily replaced.

I carry out my present invention as follows:

My improved coupler attachment consists, essentially, of two metal side walls A A′, constructed to be attached in any suitable manner to the center sills B of a car. In the drawings said side walls A A′ are shown provided with ears $a$ at the upper and lower edges, through which said walls may be bolted to the center sills, as indicated at C. In Fig. 4 in full lines the two walls A A′ are shown separated. In dotted lines the wall A′ is shown closed up against the wall A. The walls intermediate their extremities are constructed to form a draft-spring housing in any suitable manner. To this end, as shown in the drawings, the two walls at their upper edges may be formed with inwardly-projecting flanges or shoulders $a'$ $a^2$ at the top thereof, having their adjacent edges meeting, when in place, preferably at the longitudinal center of the device, as at the meeting line $a^8$, Fig. 4. Said side walls are also formed with vertically and inwardly projecting rear walls $a^3$ $a^4$, through which said rear walls bolts D may pass to hold the two walls A A′ firmly together. To the rear of the housing the side walls are also preferably formed with inwardly-projecting shoulders or lugs $a^5$ $a^6$, through which additional bolts D′ may unite the two side walls together. The two horizontal flanges or shoulders $a'$ $a^2$ form the top of the housing.

E represents a draft-spring, and E′ $E^2$ represent follower-plates located within the housing to the front and rear of said spring.

As shown in Fig. 5, the interior surfaces of the two side walls A A′ are formed with integral inwardly-projecting ribs or stops toward the front of the draft-spring housing (indicated in Fig. 5 by the numeral 6) and with similar ribs or stops toward the rear of said housing, as indicated by the numeral 7, and also with intermediate ribs or stops, (indicated by the numeral 8.) Between the ribs 6 and 8 are thus formed recesses 9, in which the follower-plate E′ may reciprocate, while between the ribs 7 and 8 are also formed recesses 10, in which the follower-plate $E^2$ may reciprocate, the ribs to the front and to the rear of the several recesses forming stops for the follower-plates and preventing any possibility of an undue compression of the draft-springs. I do not, however, limit myself to the employment of the central ribs or stops 8 nor to this particular interior form of the draft-spring housing disclosed in Fig. 5 and described in connection therewith, inasmuch as my improved coupler attachment is adapted to form draft-spring housings of any desired construction; neither do I limit myself to the employment in connection therewith of the follower-plates E′ and $E^2$, as other devices may be used in lieu thereof within said housing. Consequently I would have it understood that I contemplate the construction of my improved coupler attachments with or without the interior ribs and lugs hereinbefore described, and illustrated in the drawings.

F denotes the draw-head. B′ is its shank. $B^2$ is a yoke, which, as above explained, may conform to the Master Car-Builders' standard yoke, the yoke engaging with the rear end of the shank B′ of the draw-bar and passing about the rear follower-plate $E^2$.

To close the under side of the draft-spring housing and to support the follower-plates or analogous devices and permit their ready removal, if required, in order to facilitate repairs, I employ a gate or spider G, so engaged with the walls A A′ that it may readily be disengaged from its normal position. To this end I prefer to hinge said gate or spider at its rear end, as indicated at $g$, which may be accomplished by means of a bolt $g'$, the forward end of said gate or spider being also held in closed position by an additional bolt $g^2$. The lower edges of the said walls may be formed with ears $a^7$ $a^7$ to receive said bolts. The front end of the housing is open.

In this manner I form my improved coupler attachments with metal draft-plates forming the side walls of the housing and attachable to the center sills of the car.

What I claim as my invention is—

1. A combined draft apparatus and draft-spring housing for railway-cars consisting of two metal walls forming draft-plates to take the place of the customary draft-timbers of a car, said walls constructed with integral inwardly-projecting contacting flanges to form draft-spring housing between said walls open at the bottom of said housing, an additional device to close the bottom of said housing, and means to unite said walls, substantially as set forth.

2. In a coupler attachment for railway-cars, the combination of two metal walls forming draft-plates to take the place of the customary draft-timbers and constructed to form the side walls, top and rear of a draft-spring housing between them integral with said walls, and means to unite said walls, said walls formed with integral inwardly-projecting top and rear flanges meeting one another intermediate the sides of said walls, and forming the top and rear of said draft-spring housing, substantially as set forth.

3. In a coupler attachment for railway-cars, integrally-combined draft-plates and a draft-spring housing consisting of two metal walls forming the draft-plates to take the place of the customary draft-timbers, said walls constructed to form a draft-spring housing between them integral with said walls open at the bottom of the housing and having integral stops to limit the movement of follower-plates in said housing, a draft-spring in said housing, an additional device to close the bottom of said housing, and bolts passed horizontally through said walls to unite said walls together, said walls formed with contacting flanges intermediate the sides of the walls preventing lateral compression of said spring, substantially as set forth.

4. A combined draft apparatus and draft-spring housing for railway-cars consisting of two metal walls forming draft-plates to take the place of the customary draft-timbers constructed to form a draft-spring housing between them integral with said walls, horizontal bolts uniting said walls, and a movable gate or spider to close the bottom of said housing, said walls formed with inwardly-projecting flanges forming the top and the rear of the housing, substantially as described.

5. A combined draft apparatus and draft-spring housing for railway-cars consisting of two metal side walls independently secured to the car-sills, and constructed to form the side walls and top of a draft-spring housing between them integral with said walls, a draft-spring in said housing, follower-plates in said housing, an additional device to close the bottom of said housing, and means to hold said side walls together, said side walls constructed with integral contacting flanges to form said housing, and with integral stops to limit the movement of said follower-plates, substantially as described.

6. In a coupler attachment for railway-cars, a housing provided with separable metal walls forming draft-plates to take the place of the customary draft-timbers, said walls formed with contacting top flanges $a'$, $a^2$, and with inwardly-projecting contacting rear walls $a^3$, $a^4$, and bolts passed horizontally through said walls to unite said plates, substantially as set forth.

7. A coupler attachment for railway-cars

consisting of two metal walls forming draft-plates and constructed to form a draft-spring housing between them integral with said walls, a draft-spring in said housing, follower-plates in said housing, and means to unite said walls, said walls formed with integral stops to limit the movement of the follower-plates, with inwardly-projecting flanges $a'$, $a^2$ forming the top of the housing, with inwardly-projecting flanges $a^3$, $a^4$ forming the rear of the housing, and with inwardly-projecting flanges $a^5$, $a^6$ between the housing and the rear ends of said walls, substantially as set forth.

In testimony whereof I sign this specification in the presence of two witnesses.

WILLIAM THORNBURGH.

Witnesses:
S. S. BLOOM,
H. T. THORNBURGH.